

ON THE MOLLUSCA PROCURED DURING THE "PORCUPINE"
EXPEDITIONS, 1869-70. SUPPLEMENTAL NOTES, PART IV.¹

By E. R. SYKES, B.A.

Read 13th May, 1910.

THE following pages complete the account of the Gastropods which were not described by Jeffreys, and in the next part I hope to take up the work of supplementing the portion already published by him, and to deal with a number of minute forms which had not been fully investigated ere his death. The figured specimens are in the British Museum.

DONOVANIA LINEOLATA (Tiberi).

Nesæa lineolata, Tiberi, Journ. Conchyl., 1868, p. 76, pl. v, fig. 5.

"Porcupine" Expedition, 1870, Adventure Bank, 92 fathoms; Station 30.

Two specimens, from Station 30, were separated by Mr. Marshall with a note that they appeared possibly distinct from *D. lineolata*, and that the Marquis de Monterosato was unable to identify them. I am inclined to consider them as only a variety of this form. One box of similar specimens in the Museum bears the Station numbers 26, 27, 28, 28a; their accuracy is doubtful.

DONOVANIA MINIMA (Montagu).

Buccinum minimum, Montagu, Test. Brit., i, p. 247.

"Porcupine" Expedition, 1870, Tangier Bay, 35 fathoms; Station 50.

Distribution.—British Isles to Madeira and Mediterranean. Fossil in Pliocene.

The specimens from the first locality belong to the variety *pallescens*, Jeff.

DONOVANIA VULPECULA (Monterosato).

Lachesis vulpecula, Monterosato, Not. Conch. Med., 1872, p. 49.

"Porcupine" Expedition, Station 50; Adventure Bank, 92 fathoms.

Distribution.—Mediterranean.

CONUS MEDITERRANEUS (Hwass.), Bruguière.

Conus Mediterraneus, Bruguière, Ency. Méth., iv, pl. cccxxx, fig. 5.

"Porcupine" Expedition, 1870, Benzert Road, 40-65 fathoms; Adventure Bank, 92 fathoms.

Distribution.—Generally throughout the Mediterranean. A Tertiary fossil.

The stations are taken from the boxes in the British Museum; the locality of "Cadiz" also appears.

¹ For Parts I, II, and III, see Vol. VI, pp. 23, 322; Vol. VII, p. 173.

CANCELLARIA CANCELLATA (Linné).

Cancellaria cancellata, L.: Jeffreys, Proc. Zool. Soc., 1885, p. 49.

Distribution.—See Kobelt, Icon. Europ. Meeresconch., iii, p. 210; and Locard, Expéd. Trav. Talisman, i, p. 302.

CANCELLARIA CORONATA, Scacchi.

Cancellaria coronata, Scacchi, Notizie, p. 34; Philippi, Moll. Sicil., ii, p. 177, pl. xxv, fig. 27.

“Poreupine” Expedition, 1870, Adventure Bank, 92 fathoms.

Distribution.—Several deep-water localities in the Mediterranean. A fossil in Sicilian, etc., Tertiary.

CANCELLARIA MINIMA, Reeve.

Cancellaria minima, Reeve: Jeffreys, Proc. Zool. Soc., 1885, p. 49.

Add to localities of the cruise of 1870, Stations 26, 27.

CANCELLARIA PUSILLA, H. Adams.

Cancellaria mitraiformis, Brocchi: Jeffreys, Proc. Zool. Soc., 1885, p. 49.

I think the recent shell is distinct from the fossil; there is already a *C. pusilla*, Sby.,¹ but I do not add to the nomenclature as there is some doubt. Add Stations 26 and 27 (J. T. Marshall).

ADMETE VIRIDULA (Fabr.).

Cancellaria viridula, Fabr.: Jeffreys, Proc. Zool. Soc., 1885, p. 48.

Add to cruise of 1870, Stations 3 and 17 (J. T. Marshall).

MARGINELLA CLANDESTINA, Brocchi.

Marginella clandestina, Brocchi, Conch. Foss. Subapp., ii, p. 642.

“Poreupine” Expedition, 1870, Stations 3, 30, 50, 56; Adventure Bank, 92 fathoms.

Distribution.—Throughout the Mediterranean. A Tertiary fossil.

Several other station numbers appear on the Museum boxes, but I am doubtful as to them.

MARGINELLA HESPERIA, SYKES.

Marginella hesperia, Sykes, Proc. Malac. Soc., vi, p. 316, pl. xvii, fig. 7, 1905.

“Poreupine” Expedition, 1870, Station 24.

Two specimens of what probably is a dwarf form of this species are in the Museum, but as the box containing the *two* shells bears *three* station numbers I forbear to quote them.

MARGINELLA MILIARIA (Linné).

Voluta miliaria, Linné, Syst. Nat., 10th ed., p. 730.

“Poreupine” Expedition, 1870, Station 50; Gibraltar Bay, 3 fathoms (Brit. Mus.); Algeiras Bay, 1–15 fathoms (Brit. Mus.).

¹ Conch. Illustr., *Cancellaria*, p. 6, 1833.

Distribution.—Mediterranean, also Canaries. A Tertiary fossil in S. Europe.

MARGINELLA MINUTA, Pfeiffer.

Marginella minuta, Pfeiffer, Wiegmann's Archiv, i, p. 259, 1840.

"Porcupine" Expedition, 1870, Stations 17, 30, 50, 56; Adventure Bank, 92 fathoms.

Distribution.—According to Tryon the species is also found in the West Indies, Florida, and the Red Sea. A Pliocene fossil.

MARGINELLA OCCULTA, Monterosato.

Marginella occulta, Monterosato, Test. Nov. Siciliae, p. 17, 1869.

Gibberula occulta, Monterosato, Locard, Expéd. Trav. Talisman, i, p. 133.

"Porcupine" Expedition, 1870, Adventure Bank, 92 fathoms.

Distribution.—Several deep-sea localities in the Mediterranean. A Pliocene and post-Pliocene fossil.

ERATO LÆVIS (Donovan).

Voluta laevis, Donovan, Brit. Shells, v, pl. clxv.

"Porcupine" Expedition, 1869, Little Minch, 60–80 fathoms; Stations 2, 23a; 1870, Adventure Bank, 92 fathoms; Cape Sagres, 45–58 fathoms; Station 50.

Distribution.—North Atlantic and Mediterranean.

CYMBIUM PAPILLATUM, Schumacher.

Cymbium papillatum, Schumacher, Nouv. Syst., 1817, p. 237; Kobelt, Icon. Europ. Meeresconch., ii, p. 1.

"Porcupine" Expedition, 1870, off Cape Sagres, 45–58 fathoms.

Distribution.—Mediterranean and Atlantic.

One very dead shell.

HALIA PRIAMUS (Meuschen).

Helix Priamus, Meuschen, Cat. Mus. Gron., No. 1353.

Halia Priamus, Meuschen: Kobelt, Icon. Europ. Meeresconch., ii, p. 6.

"Porcupine" Expedition, 1870, Stations 26 (fragments), 30 (fragments); off Cape Sagres, 45–58 fathoms.

Distribution.—From Spain to Senegal. Fossil in the Italian Pliocene (Jeffreys).

"In the Porcupine Expedition of 1870, I dredged, off Cape Sagres, together with a perfect specimen of *Halia*, a rather large valve of *Avicula hirundo*, on which were affixed three ovi-capsules of the present species. One of the capsules or cases enclosed two young specimens of *Halia*; each of the other two containing only a single specimen. The young were marked with a row of the usual interrupted spots above the rim of the outer lip. These capsules were solitary and closely resembled those of *Buccinopsis* [*Liomesus*]. The apex of the shell and the canal are alike in both genera. Judging from the

highly polished surface of the shell in *Halia* I should conclude that its voluminous foot could enclose and cover the shell, as in *Ancilla*, *Eburna*, or *Cypræa*, and, to a certain extent, as in *Natica* (Jeffreys)."

VOLUTOMITRA GRÆNLANDICA (Beck), Möller.

Mitra Grænlandica (Beck), Möller, Index Moll. Grænlandiæ, p. 15; Kobelt, Icon. Europ. Meeresconch., ii, p. 4.

"Porcupine" Expedition, 1869, Stations 23a (J. T. Marshall), 65 (Brit. Mus.), 74 (J. T. Marshall and Brit. Mus.).

Distribution.—Northern and Arctic seas.

MITRA BICONICA, n.sp.

Shell elongate, pale yellow (dead), rather solid; whorls 6-7, rather flattened, with a well-marked suture; protoconch smooth; the residue of the shell is marked by numerous, densely set spiral striæ, crossed by a few obsolete longitudinal ribs; mouth elongate, narrow; columella with two folds; outer margin sulcate within. Alt. 9, lat. 3 mm.



"Porcupine" Expedition, 1870, Station 24.

Somewhat resembling an elongate form of the well-known Pleurotomoid, *Mangilia septangularis*.

MITRA COLUMBELLARIA, Scacchi.

Mitra columbellaria, Scacchi, Cat., p. 10, figs. 12, 13; Kobelt, Icon. Europ. Meeresconch., ii, p. 56.

"Porcupine" Expedition, 1870, Adventure Bank, 92 fathoms; Benzert Road, 40-65 fathoms; Stations 50, 56.

MITRA CORNICULA (Linné).

Voluta cornicula, Linné, Syst. Nat., 12th ed., p. 1191.

Mitra cornicula, Linné: Kobelt, Icon. Europ. Meeresconch., ii, p. 50.

"Porcupine" Expedition, 1870, Station 50 (one immature shell).

Distribution.—Mediterranean Sea, and also in the Atlantic.

MITRA EBENUS, Lamarck.

Mitra ebenus, Lamarck, Ann. du Mus., xvii, No. 58; Kobelt, Icon. Europ. Meeresconch., ii, p. 47.

"Porcupine" Expedition, 1870, Station 58 (Brit. Mus.).

Distribution.—Various Mediterranean localities.

MITRA TRICOLOR (Gmelin).

Voluta tricolor, Gmelin, Syst. Nat., 13th ed., p. 3476.

Mitra tricolor, Gmelin: Kobelt, Icon. Europ. Meeresconch., ii, p. 54.

"Porcupine" Expedition, 1870, Adventure Bank, 92 fathoms (J. T. Marshall).

Distribution.—Mediterranean.

MITRA ZONATA, Marryat.

Mitra zonata, Marryat, Trans. Linn. Soc., xiii, p. 338; Kobelt, Icon. Europ. Meeresconch., ii, p. 45.

"Porcupine" Expedition, 1870, Station 50 (J. T. Marshall).

Distribution.—Several localities in the Mediterranean. Pliocene and (?) Miocene.

FUSUS BROCCII (Monterosato).

Murex Broccii, Monterosato, Nuova Rivista, p. 39.

Fusus Broccii, Monterosato: Kobelt, loc. cit., i, p. 54.

Murex craticulatus, Brocchi, non Linné.

Non *Tritonium craticulatum*, Fabr.

"Porcupine" Expedition, 1870, Stations 50, 50a; Capo de Gata, 40–69 fathoms; Adventure Bank, 30–92 fathoms.

Distribution.—Mediterranean.

FUSUS PULCHELLUS, Philippi.

Fusus pulchellus, Philippi, Moll. Sicil., ii, p. 178; Kobelt, loc. cit., i, p. 55.

"Porcupine" Expedition, 1870, Capo de Gata, 40–69 fathoms.

Distribution.—Mediterranean to (probably) Spain and Portugal. Fossil in Pliocene.

Also in the Museum as from Station 58, 1869.

FUSUS ROSTRATUS (Olivi).

Murex rostratus, Olivi, Zool. Adriat., p. 153.

Fusus rostratus, Olivi: Kobelt, loc. cit., i, p. 52.

"Porcupine" Expedition, 1870, Stations 50, 56; Adventure Bank, 92 fathoms; Benzert Road, 40–65 fathoms; Rasel Amoush, 45 fathoms.

Distribution.—Mediterranean to Canaries. Fossil from the Miocene.

FUSUS SYRACUSANUS (Linné).

Murex Syracusanus, Linné, Syst. Nat., 12th ed., p. 1224.

Fusus Syracusanus, Linné: Kobelt, loc. cit., i, p. 50.

"Porcupine" Expedition, 1870, Stations 50, 56; Capo de Gata, 40–69 fathoms.

Distribution.—Mediterranean and to Canaries. Fossil from the Miocene.

FASCIOLARIA LIGNARIA (Linné).

Murex lignarius, Linné, Syst. Nat., 12th ed., p. 1224.

Fasciolaria lignaria, Linné: Kobelt, loc. cit., i, p. 47.

“Porcupine” Expedition, 1870, Station 10 (a fragment).

Distribution.—Mediterranean. A Pliocene fossil.

MEYERIA ALBELLA (Dunker & Metzger).

Tritonium pusillum, M. Sars, Vid. Selsk. Verh. Christ., 1858, p. 79 (*nomen*).

Meyeria pusilla, Sars, Locard, Expéd. Trav. Talisman, i, p. 336.

Latirus albus, Jeffreys: Depths of the Sea, p. 464 (nom. and fig.).

Lathyrus albellus, Dunker & Metzger, Nachrbl. Deutsch. Mal. Ges., 1874, p. 11.

Meyeria alba, Jeffreys: Kobelt, loc. cit., i, p. 31.

“Porcupine” Expedition, 1869 (three specimens in one box bearing four localities).

Distribution. North Atlantic to Azores.

KRYPTOS ELEGANS (Jeffreys), Dantz. & Fisch.

Kryptos elegans (Jeffreys), Dautzenberg & Fischer, Mém. Soc. Zool.

France, ix, p. 435; Kobelt, loc. cit., iii, p. 281.

“Porcupine” Expedition, 1870, Stations 16, 17, 17a, 24, 30.

Distribution.—Middle Atlantic Ocean and Azores.

The systematic position of this form remains uncertain; all the specimens I have seen are very immature. It is not the *Fusus amblyterus*, Watson.

NEPTUNEA ANTIQUA (Linné).

Neptunea antiqua, Linné: Kobelt, Icon. Europ. Meeresconch., i, p. 63.

“Porcupine” Expedition, 1869, Station 70 (one young, alive).

Distribution.—Arctic seas to the Channel Islands and the French coasts.

NEPTUNEA CONTRARIA (Linné).

Neptunea contraria, Linné: Kobelt, Icon. Europ. Meeresconch., i, p. 65.

“Porcupine” Expedition, 1870, Station 58 (a fragment).

Distribution.—Portuguese, Spanish, and French coasts, the occurrence in the Mediterranean off Sicily being doubtful (Kobelt). A Pliocene fossil. Mr. Marshall adds Station 13, but I cannot trace the specimen.

NEPTUNEA DESPECTA (Linné).

Neptunea despecta, Linné: Kobelt, Icon. Europ. Meeresconch., i, p. 63.

“Porcupine” Expedition, 1869, Station 11 (live).

Distribution.—Arctic seas to the British Isles (in deep water). A Pliocene fossil.

The box in the Museum is labelled “W. of Ireland, 85–110 fath., St. 1, 11”. The depth would fit Station 1, but not Station 11;

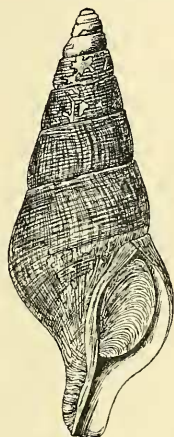
however, as an examination of Jeffreys' notebook yields a note of the species under Station 11 and not Station 1, I have followed him.

NEPTUNEA (SIPHO) ATTENUATA (Jeffreys).

Fusus attenuatus, Jeffreys, Proc. Roy. Soc., xviii, p. 434, 1870 (nom. sol.); Ann. Nat. Hist., xix, p. 326, April, 1877.

Neptunea attenuata, Jeffreys: Kobelt, Icon. Europ. Meeresconch., i, p. 78.

"Porcupine" Expedition, 1869, Stations 20, 28, 30, 43.



Distribution.—Also N. Norway (Sars), and a few deep-sea localities in the Atlantic.

I have found the "Porcupine" specimen to which Jeffreys refers in his original description, and now give a figure of it, as those I have seen are unsatisfactory. The references are as quoted above, and not as given by Kobelt.

NEPTUNEA (SIPHO) DALLI, Friele.

Neptunea Dalli, Friele, Norske Nordhavs Exped., Buccinidæ, p. 19.

"Porcupine" Expedition, 1869, Stations 64, 65.

Distribution.—Northern Atlantic, in deep water.

I have followed Jeffreys' identification; the species is unknown to me.

NEPTUNEA (SIPHO) EBUR (Mörch).

Siphonorbis ebur, Mörch, Journ. de Conch., p. 398, 1869.

Fusus Sarsii, Jeffreys, Nature, Dec. 9, 1869; "Depths of the Sea," p. 464, 1873.

Neptunea Sarsii, Jeffreys: Kobelt, Icon. Europ. Meeresconch., i, p. 79.

"Porcupine" Expedition, 1869, Stations 54, 65.

Distribution.—Northern seas to the British Isles. Recorded as fossil in the Red Crag.

The following interesting notes, bearing on the specific position of this species, occur in Jeffreys' MSS. They are headed "From Professor Steenstrup, 8th April, 1879; types of *Fusus ebur*, Mörch, *F. togatus*, Mörch, and *F. Pfaffi*, Mörch". From this I infer that Jeffreys had borrowed these shells.

"Closely and carefully compared all these typical specimens (having Mörch's names in his handwriting) with specimens of *F. Sabini* (Gray) from Spitzbergen, the Norwegian Arctic Expedition of 1877 (off Jan Mayen Island, Friele), and the 'Porcupine' and the 'Valorous' Expeditions. All these specimens [i.e. *ebur*, *togatus*, and *Pfaffi*, E. R. S.] certainly belong to one and the same species. In the specimen of *F. ebur* (a dead shell) the epidermis is wanting, except a few very small traces. In *F. togatus* there are a few fragments of the epidermis close to the sutures; and this epidermis is quite similar to that of *F. Pfaffi*, which is well covered. *F. ebur* is the largest shell. Epidermis ciliated.

"*F. tortuosus*, of Reeve, judging from the typical specimen, is somewhat different, being more slender and having the canal curved; the epidermis is smooth. But it may be a variety of *F. Sabini*."

Jeffreys also says, "Herr Friele, in his excellent monograph on the Buccinidæ from the Vöringen Expedition, says that I regarded this species to be the same as my *F. eurtus*. This is not quite correct. I believed *F. ebur* of Mörch might be synonymous with *F. Sarsii*, which Friele assigned to my *F. eurtus*. The two latter species I have always considered distinct."

NEPTUNEA (SIPHO) FUSIFORMIS (Broderip).

Buccinum fusiforme, Broderip, Zool. Journ., v, p. 45, 1829.

Neptunea fusiformis, Broderip: Kobelt, Icon. Europ. Meeresconch., i, p. 86.

"Porcupine" Expedition, 1869, Stations 4, 6, 9, 36, 45a, 78, 89; 1870, Stations 8, 9, 11, 13, 16.

Distribution.—From Northern seas to the Spanish coasts, generally in fairly deep water.

Jeffreys gives the following account of the animal of a specimen dredged on the 3rd of June, 1869, at Station 6:—"Body light brownish-yellow; pallial tube rather short, tinged with purple blotches; tentacles conical and short; eyes very small, seated on stalks about half-way up the tentacles; foot thick, streaked near the opercular lobe with purplish-brown, rounded in front with slight auricles, squarish behind, equally broad throughout. Active and not at all shy."

NEPTUNEA (SIPHO) GRACILIS (Da Costa).

Buccinum gracile, Da Costa, Brit. Conch., p. 124.

Neptunea gracilis, Da Costa: Kobelt, Icon. Europ. Meeresconch., i, p. 72.

"Porcupine" Expedition, 1869, Stations 12, 35, 45a; 1870, Station 13 (dead and very young).

Distribution.—North Atlantic to the Bay of Biscay. A post-Tertiary fossil.

NEPTUNEA (SIPHO) ISLANDICA (Chemnitz).

Fusus Islandicus, Chemnitz, Conch. Cab., iv, p. 159, pl. cxli, figs. 1312, 1313.

Neptunea Islandica, Chemnitz: Kobelt, Icon. Europ. Meeresconch., i, p. 71.

"Porcupine" Expedition, 1869, Stations 10, 84; 1870, Station 13.

Distribution.—Arctic seas and deep water in the North Atlantic.

NEPTUNEA (SIPHO) JEFFREYSIANA (Fischer).

Fusus Jeffreysianus, Fischer, J. Conchyl., xvi, p. 37, 1868.

Neptunea Jeffreysiana, Fischer: Kobelt, Icon. Europ. Meeresconch., i, p. 75.

Fusus buccinatus, Jeffreys, non Lamarek.

"Porcupine" Expedition, 1869, Station 10; 1870, Station 30.

Distribution.—British Isles to the Bay of Biscay.

NEPTUNEA (SIPHO) LACHESIS (Mörch).

Fusus lachesis, Mörch, J. Conchyl., xvii, p. 397, 1869.

Neptunea lachesis, Mörch: Kobelt, Icon. Europ. Meeresconch., i, p. 83.

Tritonium terebrales, Sars MS. [non *Neptunea terebralis*, Gould, of which *N. Spitzbergensis*, Rve., is a synonym].

Non *Fusus lachesis*, E. Sismunda, Syn., 2nd ed., p. 38, 1847 [nom. sol.]; D'Orbigny, Prodrôme, iii, p. 68, 1852 [nom. sol.]; Bellardi, Moll. Terz. Piemonte, i, 138, 1872 [descr. and fig.].

"Porcupine" Expedition, 1869, Station 51.

Distribution.—North Atlantic.

Inasmuch as *Fusus lachesis*, Sism., remained a mere name until the description by Bellardi in 1872, I have not thought it necessary to rename this species.

Very young specimens are also in the Museum as from Station 62, but I cannot confirm this locality, the depth given being erroneous.

Distinct from the present species, but identical with one another, are, I think, *Fusus Spitzbergensis*, Rve., and *F. terebralis*, Gould.

NEPTUNEA (SIPHO) PERTENUIS, n.sp.

Shell elongately fusiform, thin, fragile, very pale yellowish-white; whorls 7, rather convex, moderately increasing; protoconch smooth, on the second whorl very numerous fine spirals appear, being crossed up to the fifth whorl by obsolete longitudinal riblets, these latter gradually fade out and the last whorl is sculptured only by the densely set, irregular spirals; mouth drawn out, the canal being moderately long and rather widely open. Alt. 27.5, diam. 10 mm.

"Porcupine" Expedition, 1869, Station 51 (one live specimen); also a variety (one specimen) from Station 65.

The type was marked by Jeffreys as 'n.sp.'; but he had not drawn up any diagnosis. It seems to be nearest to *N. latericeus*, Möller, but



has more rapidly increasing whorls, the canal is more widely open, and the spirals are finer and more numerous.

NEPTUNEA (SIPHO) PROPINQUA (Alder).

Fusus propinquus, Alder, Cat. Moll. Northumb. Durham, p. 63 (Trans. Tyneside Club).

Neptunea propinqua, Alder: Kobelt, Icon. Europ. Meeresconch., i, p. 76.

"Porcupine" Expedition, 1869, Stations 15, 17, 18, 24, 30, 68, 70.

Distribution.—From Greenland south to the British Isles.

A Pliocene and post-Tertiary fossil.

Mr. Marshall notes: "In the report of the 'Valorous' Expedition, Jeffreys mistakenly recorded this species from 'Bay of Biscay, 109–1380 f.', in the 'Porcupine' Expedition of 1870, instead of from West of Ireland, Stations 24 and 30, in the expedition of 1869. Canon Norman has also recorded it from 'N. of Hebrides, 189–530 f., Porcupine Exp., 1869', instead of 'Lightning' Expedition, 1868."

NEPTUNEA (SIPHO) PUPULA (Fischer).

Fusus pupula, Fischer, Journ. de Conch., p. 274, 1882.

"Porcupine" Expedition.

A box in the Museum, named *pupula*, contains three shells (two adult), and is labelled "9, 6, 165 fath., 90 fath. 1870". Assuming that the young shell is the same as the others, we may also refer here a shell from Station 3, I am not sure of which cruise. Reverting to the former label, these stations were, from their depths, in the cruise of 1869, while Jeffreys in his MS. says the species came from the cruise of 1870. All one can really say is that this species was found during one of the cruises.

NEPTUNEA (SIPHO) SABINI (Gray).

Buccinum Sabini, Gray, Supp. and App. Parry's First Voyage, p. cxi, 1824.

Fusus Sabini, Gray: Jeffreys, Ann. Nat. Hist., vol. xix, p. 327, 1877.

"Porcupine" Expedition, 1869, Stations 11, 13; 1870, Stations 13, 22.

The above station numbers are due to Mr. Marshall. See notes under *N. ebur* (Möreh).

NEPTUNEA (SIPHO) TURGIDULA (Jeffreys), Friele.

Fusus turgidulus, Jeffreys: Friele, *Nyt. Mag. Naturv.*, p. 8, 1877.

Neptunea turgidula, Jeffreys: Kobelt, *Icon. Europ. Meeresconch.*, i, p. 74.

"Porcupine" Expedition, 1869, Stations 65, 74, 75, 78 (young), 84.
Distribution.—North Atlantic.

The stations are taken from the Museum boxes, and Nos. 65 and 84 are confirmed by Mr. Marshall's notes. Jeffreys suggests that *N. Hanseni*, Friele, may be a variety.

NEPTUNEA (MOHNIA) MOHNI (Friele).

Fusus Mohni, Friele, *Nyt. Mag. Naturv.*, xxiii, p. 6, 1877.

Neptunea Mohni, Friele: Kobelt, *Icon. Europ. Meeresconch.*, i, p. 90.

"Porcupine" Expedition, 1869, Stations 62, 64.

Distribution.—Arctic seas, and south to the British Isles, in deep water.

NEPTUNEA (VOLUTOPSIS) NORVEGICA (Chemnitz).

Strombus Norvegicus, Chemnitz, *Conch. Cab.*, xi, p. 218.

Neptunea Norvegica, Chemnitz: Kobelt, *Icon. Europ. Meeresconch.*, i, p. 66.

"Porcupine" Expedition, 1869, Station 68 (live).

Distribution.—Arctic and North Atlantic seas, North America (Jeffreys). A Pliocene fossil.

TROSCHELIA BERNICIENSIS (King).

Fusus Berniciensis, King, *Ann. Nat. Hist.*, xviii, p. 246.

Troschelia Berniciensis, King: Kobelt, *Icon. Europ. Meeresconch.*, i, p. 59.

"Porcupine" Expedition, 1869, Stations 6 (fragments), 14 (fragments), 25 (egg-capsules), 39, 57, 68, 74, 78, 84; 1870, Stations 3, 8, 9.

Distribution.—Northern seas. It has been suggested that the species is circumpolar, but this needs confirmation.

LIOMESUS DALEI (Sowerby).

Buccinum Dalei, Sowerby, *Min. Conch.*, v, p. 139, pl. cccclxxxvi, figs. 1, 2.

Buccinopsis Dalei, Sowerby: Kobelt, *Icon. Europ. Meeresconch.*, ii, p. 116.

"Porcupine" Expedition, 1869, Stations 7, 10, 45a-b, 52.

Distribution.—North Atlantic. A Pliocene fossil.

BUCCINUM FINMARKIANUM, Verkrüzen.

Buccinum Finmarkianum, Verkrüzen, *Jahrb. Deutsch. Mal. Ges.*, ii, p. 237; Kobelt, *loc. cit.*, i, p. 103.

"Porcupine" Expedition, 1869, Station 65 (young, but live).

Distribution.—Northern Atlantic.

I have accepted the identification by Jeffreys in the Museum.

BUCCINUM GRÆNLANDICUM, Chemnitz.

Buccinum Grænladicum, Chemnitz, Conch. Cab., x, p. 182; Kobelt, loc. cit., i, p. 112.

“Porcupine” Expedition, 1869, Station 65.

Distribution.—Arctic seas in both hemispheres. A Pliocene fossil.

Jeffreys records his specimens as var. *glabra*, and gives the following, which I take to be a description of a new variety: “Thin, glassy, and smooth, with the exception of fine spiral striae on the upper whorls, which afterwards disappear and are replaced by a few and indistinct ridge-like lines.”

BUCCINUM HUMPHREYSIANUM, Bennett.

Buccinum Humphreysianum, Bennett, Zool. Journ., i, p. 398; Kobelt, loc. cit., i, p. 102.

“Porcupine” Expedition, 1869, Stations 1, 6, 8, 45a-b.

Distribution.—Finmark to Bantry Bay.

According to Jeffreys “*B. nivale* of Friele is the young of the variety *lactea*”.

BUCCINUM VENTRICOSUM, Kiener.

Buccinum ventricosum, Kiener, Coq. Viv., *Buccinum*, p. 4.

Buccinum fusiforme, Kiener: Kobelt, loc. cit., i, p. 101.

“Porcupine” Expedition, 1870, Station 30 (fragment).

Distribution.—Atlantic off Spain, etc., and in Mediterranean.

I have followed Jeffreys in the name adopted for this form, and his final view as to its specific rank.

BUCCINUM UNDATUM, Linné.

Buccinum undatum, Linné, Syst. Nat., 12th ed., p. 1204; Kobelt, loc. cit., i, p. 99.

“Porcupine” Expedition, 1869, Stations 1 (var. *Zetlandica*), 2 (var. *flexuosa*), 6 (var. *Zetlandica*), 7, 8, 11 (of a conical shape, rather strong, without longitudinal ribs, closely and finely striated transversely or spirally), 25 (var. *Zetlandica*), 45a-b (conical variety), 68 and 69 (var. *Zetlandica*); Lough Foyle; near Belfast; off Lerwick (var. *Zetlandica*).

Distribution.—From Arctic seas, south to Gulf of Lyons; also on American coasts. A Pliocene fossil.

“BUCCINUM OBLITUM, n.sp.

“Shell oval, rather solid, opaque and somewhat glossy. Sculpture: several curved and flexuous longitudinal ribs on the last or body whorl, which are crossed by about as many spiral ridges, so as to give a cancellated or decussated appearance; each of the upper whorls (except those forming the apex, which are smooth) has also two or three of the same spiral ridges; the whole intermediate surface is covered with numerous fine and close-set spiral striae; the points of intersection between the ribs and ridges are more or less nodulous;

colour pale yellowish-white; epidermis none; spire short; whorls 5-6, moderately convex; the last occupies three-fourths of the shell with the mouth placed upwards; the two upper whorls which compose the apex cylindrical and twisted; suture deepish; mouth oval and expanded, angulated above; length about three-fifths of the spire; canal very short, open, and truncate; outer lip semicircular, reflected, and having a thickened edge; inside slightly grooved in the direction of the spiral ridges; inner lip broad and glazed; pillar strong and flexuous. L. 1, B. 0.7 inch.

"'Porcupine' Expedition, 1869, Station 65.



"Six dead specimens. In one of them the longitudinal ribs are wanting; it has stronger spiral ridges, and is smaller than the other specimens.

"This species was figured in Sir Wyville Thomson's *Depths of the Sea* (1873), p. 463, fig. 76, under my name of *Buccinopsis striata*. As the operculum of the present species is not known, it is more than questionable whether it can be placed in *Buccinopsis*, and I must provisionally leave it in *Buccinum*. It may be allied to *B. abyssorum* of Verrill, as well as to *B. Baerii* of Middendorff."

The above is taken verbatim from Jeffreys' MS., save that I have changed the name he gave, his being already in use.

PURPURA LAPILLUS (Linné).

Buccinum lapillus, Linné, Syst. Nat., 12th ed., p. 1202.

Purpura lapillus, Linné: Kobelt, loc. cit., i, p. 36.

"Porcupine" Expedition, 1869, Donegal Bay, 25-40 fathoms; 1870, Vigo Bay, 20 fathoms.

Distribution.—North Atlantic from Arctic seas to Mogador. The Mediterranean records are dubious. A Pliocene fossil.

PISANIA MACULOSA (Lamarck).

Buccinum maculosum, Lamarck, Anim. sans Vert., vii, p. 269.

Pisania maculosa, Lamarck: Kobelt, Icon. Europ. Meeresconch., i, p. 93.

"Porcupine" Expedition, 1870, Gibraltar.

Distribution.—Mediterranean; the Atlantic records are doubtful. Fossil in Miocene of S. Europe.

EUTHRIA CORNEA (Linné).

Murex corneus, Linné, Syst. Nat., 12th ed., p. 1224.

Euthria cornea, Linné: Kobelt, Icon. Europ. Meeresconch., i, p. 118.

"Porcupine" Expedition, 1870, Capo de Gata, 40-69 fathoms.

Distribution.—Generally throughout the Mediterranean. Fossil since the Miocene.

NASSA CORNICULUM (Olivi).

Buccinum corniculum, Olivi, Zool. Adriat., p. 144.

Nassa corniculum, Olivi: Kobelt, loc. cit., i, p. 158.

“Poreupine” Expedition, 1870, Station 50; Benzert Road, 40–65 fathoms.

Distribution.—Throughout the Mediterranean. A Miocene fossil.

NASSA INCRASSATA (Ström).

Buccinum incrassatum, Ström, König. Norsk. Vid. Selsk. Skr., iv, p. 369.

Nassa incrassata, Ström: Kobelt, loc. cit., i, p. 152.

“Poreupine” Expedition, 1869, Lough Foyle, 10 fathoms;

“Bundoran,” spawn; “C. Sagres”; 1870, Station 50.

Distribution.—Atlantic and Mediterranean. A Tertiary fossil.

NASSA LIMATA (Chemnitz).

Buccinum lima seu limatum, Chemnitz, Conch. Cab., xi, p. 87, pl. clxxxviii, figs. 1808, 1809.

Nassa limata, Chemnitz: Kobelt, loc. cit., i, p. 140.

“Poreupine” Expedition, 1870, Stations 50, 51, 56; Adventure Bank, 92 fathoms; Benzert Road, 40–65 fathoms.

Distribution.—Mediterranean seas and to Azores. A Miocene fossil.

NASSA MUTABILIS (Linné).

Buccinum mutabile, Linné, Syst. Nat., 12th ed., p. 1201.

Nassa mutabilis, Linné: Kobelt, loc. cit., i, p. 122.

“Poreupine” Expedition, 1870, Station 50.

Distribution.—Mediterranean to Azores and West Africa. A Miocene fossil.

NASSA PRISMATICA (Brocchi).

Buccinum prismaticum, Brocchi, Conch. Foss. Subapp., ii, p. 337.

“Poreupine” Expedition, 1870, off Cape Sagres, 45–58 fathoms; Rasel Amoush, 45 fathoms; Benzert Road, 40–65 fathoms.

I have kept the records made by Jeffreys distinct from those of *Nassa limata*. Dr. Kobelt is of opinion that the two forms are identical.

NASSA PYGMÆA (Lamarek).

Ranella pygmæa, Lamarek, Anim. sans Vert., vii, p. 154.

Nassa varicosa, Turton: Kobelt, loc. cit., i, p. 156.

“Poreupine” Expedition, 1870, Benzert Road, 40–65 fathoms.

Distribution.—Atlantic and Mediterranean. A Tertiary fossil.

Dr. Kobelt states, but gives no reference, that there is a prior *N. pygmæa* of Schlotheim. In Jeffreys' MS. occurs the following: “In the Bull. Mal. Ital. for 1870, Weinkauff states that Schlotheim had anticipated Lamarek in using the name *pygmæa* for a fossil species of *Nassa*. I have examined the work of Schlotheim referred to

(Beiträge zur Naturgeschichte der Versteinerungen in geognostischer Hinsicht), being an article in the Proceedings of the Royal Academy of Sciences at Munich for the year 1816 and 1817; but I failed to find either in the text or plates any such fossil as *Muricites pygmaeus*."

NASSA RETICULATA (Linné).

Buccinum reticulatum, Linné, Syst. Nat., 12th ed., p. 1204.

Nassa reticulata, Linné: Kobelt, loc. cit., i, p. 135.

"Porcupine" Expedition, 1869, Lough Swilly, 3-13 fathoms (spawn); 1870, "Cadiz"; Vigo Bay, 20 fathoms.

Distribution.—Throughout the Mediterranean and in the North Atlantic. A Pliocene fossil.

NASSA SEMISTRIATA (Brocchi).

Buccinum semistriatum, Brocchi, Conch. Foss. Subapp., p. 651.

Nassa semistriata, Brocchi: Kobelt, loc. cit., i, p. 131.

"Porcupine" Expedition, 1870, Stations 10, 53; Vigo Bay; Cape Sagres.

Distribution.—Lusitanian and Mediterranean Seas. A Miocene fossil.

Jeffreys describes the animal of a specimen from Station 10 as follows:—"Body pale orange. Siphonal sheath or tube light brown. Tentacles long, slender, and tapering. Eyes small, above the base of tentacles. Foot broad in front and expanded into two longish auricles or triangular points; extremity or hinder part pointed; caudal filaments remarkably long and separate. Spawned in the glass vessel. The spawn was free or loose and not inclosed in any capsule or case."

CYCLONASSA NERITEA (Linné).

Buccinum neriteum, Linné, Syst. Nat., 12th ed., p. 1201.

Cyclonassa neritea, Linné: Kobelt, loc. cit., i, p. 163.

"Porcupine" Expedition, 1870, "Tunis."

Distribution.—Mediterranean and Lusitanian Seas. A Pliocene fossil.

Amongst Jeffreys' notes is a letter from David Robertson, dated 1878, giving an account of two specimens of this shell "taken from the crop of the Ice-Duck (*Heralda glacialis*)", killed in Skye.

COLUMBELLA, Lamarck.

In Jeffreys' MS. occur also the names of *Columbella scripta*, Linné, and *C. minor*, Sc.; but he has not inserted any station numbers, and I cannot trace the specimens.

COLUMBELLA HIDALGOI (Monterosato).

Mitrella Hidalgoi, Monterosato, Journ. Conchyl., xxxvii, p. 116, 1889;

Kobelt, loc. cit., iv, p. 152.

"Porcupine" Expedition, 1870, Station 30.

Distribution.—Mediterranean.

COLUMBELLA RUSTICA (Linné).

Voluta rustica, Linné, Syst. Nat., 12th ed., p. 1190.

Columbella rustica, Linné: Kobelt, loc. cit., ii, p. 30.

"Porcupine" Expedition, 1870, "Cadiz" (Brit. Mus.).

Distribution.—Mediterranean and Atlantic. A Pliocene fossil.

PYRENE COSTULATA (Cantraine).

Fusus costulatus, Cantraine, Diagn. Succ., p. 20.

Pyrene costulata, Cantraine: Kobelt, loc. cit., ii, p. 33.

Columbella haliæti, Jeffreys.

"Porcupine" Expedition, 1869, Stations 10, 13, 17, 36, 42, 65; 1870, Stations 16, 51, 56; Cape Sagres, 45–58 fathoms; Adventure Bank, 92 fathoms.

Distribution.—Deep water in Atlantic and Mediterranean. Fossil in Pliocene.

I have followed Dr. Kobelt. Jeffreys notes: "The type of *Fusus costulatus* seems to have disappeared, but the description would suit *P. striolata* of Scacchi. I therefore retain the specific name which I gave to the present species."

TROPHON (?) COSTIFERUM, S. Wood.

Trophon costiferum, S. Wood, Crag Moll., p. 48, pl. vi, fig. 9.

"Porcupine" Expedition, 1870, Station 13.

Identified by Mr. Marshall.

TROPHON MULTILAMELLOSUS (Philippi).

Murex multilamellosus, Philippi, Enum. Moll. Sicil., p. 182.

Trophon multilamellosus, Philippi: Kobelt, Leon. Europ. Meeresconch., i, p. 29.

"Porcupine" Expedition, 1870, Stations 30, 51; Rasel Amoush, 45 fathoms.

Distribution.—Deep sea in the Mediterranean and off North Spain. A Pliocene fossil.

TROPHON VAGINATUS (Cristofori & Jan).

Murex vaginatus, Cristofori & Jan, Cat., p. 11.

Trophon vaginatus, C. & J.: Kobelt, loc. cit., i, 29.

"Porcupine" Expedition, 1870, Stations 13, 30, 50, 56; Adventure Bank, 92 fathoms.

Distribution.—Deep water in the Mediterranean and Atlantic. A Miocene fossil.

Several other station numbers appear on the Museum boxes, but I am unable to verify them.

Jeffreys gives the following description of the animal of a specimen from Station 13: "Body cream colour. Siphonal sheath short beyond the canal. Tentacles short, cylindrical above the eye-stalks. Eyes small, black. Foot thick, short, and broad; truncated in front and rounded behind."

TROPHONOPSIS CLATHRATUS (Linné).

Murex clathratus, Linné, Syst. Nat., 12th ed., p. 1223.

Trophon clathratus, Linné: Kobelt, loc. cit., i, p. 25.

"Porcupine" Expedition, 1869, Stations 10, 59, 65; Dingle Bay; Lough Foyle.

Distribution.—Arctic seas to North Atlantic. Fossil in Pliocene. The specimens from Lough Foyle and Dingle Bay belong to the var. *truncata*.

TROPHONOPSIS MURICATUS (Montagu).

Murex muricatus, Montagu, Test. Brit., i, p. 262.

Trophon muricatus, Montagu: Kobelt, Icon. Europ. Meeresconch., i, p. 30.

"Porcupine" Expedition, 1869, Dingle Bay (J. T. Marshall).

Distribution.—North Atlantic to Mediterranean. A Pliocene fossil.

There are a number of boxes in the Museum, but the stations and depths are in confusion. As bearing on Dr. Kobelt's remarks (loc. cit., pp. 31, 56) as to *Fusus longurio*, Weinkauff, I may say that Jeffreys notes that this latter form is identical, adding "ex typ."

TROPHONOPSIS BARVICENSIS (Johnston).

Murex Barvicensis, Johnston, Edinb. Phil. Journ., xiii, p. 225.

Trophon Barvicensis, Johnston: Kobelt, Icon. Europ. Meeresconch., i, p. 28.

"Porcupine" Expedition, 1869, Stations 9, 14, 23a; 1870, Stations 30, 50, 56; Adventure Bank, 92 fathoms.

Distribution.—North Atlantic and Mediterranean. A Pliocene fossil.

CORALLIOPHILA LAMELLOSA (Jan).

Fusus lamellosus, Jan, Cat. Rer. Nat., p. 10.

Coralliophila lamellosa, Jan: Kobelt, loc. cit., i, p. 41.

"Porcupine" Expedition, 1870, Station 50.

Distribution.—Mediterranean; the records beyond need confirmation.

Also a young specimen from Station 24, of which Mr. Marshall says "The Marquis de Monterosato suggests may be fossil".

CORALLIOPHILA MEYENDORFFII (Calcare).

Murex Meyendorffii, Calcare, Moll. Viv. Foss. Sicil., p. 38.

Coralliophila Meyendorffii, Calcare: Kobelt, loc. cit., i, p. 40.

"Porcupine" Expedition, 1870, Station 50.

Distribution.—Mediterranean to the Canaries.

MUREX.

The names of several species occur in Jeffreys' MSS., but unfortunately he has not inserted the station numbers, and I am unable to trace any of them in the Museum collection.

MUREX CRISTATUS, Brocchi.

Murex cristatus, Brocchi, Conch. Foss. Subapp., p. 394; Kobelt, loc. cit., i, p. 14.

“Poreupine” Expedition, 1870, Adventure Bank, 92 fathoms.

Distribution.—Mediterranean and to Senegal. Fossil in the Miocene.

MUREX FUSULUS, Brocchi (?).

Murex fusulus, Brocchi, Conch. Foss. Subapp., ii, p. 409; Kobelt, loc. cit., i, p. 165.

“Poreupine” Expedition, 1870, Station 56.

Distribution.—Mediterranean and to the Azores, etc.

A young specimen, of which the identity is not quite certain (J. T. Marshall).